INCH-POUND
MIL-PRF-3098/83E
27 August 1997
SUPERSEDING
MIL-C-3098/83D
5 May 1993

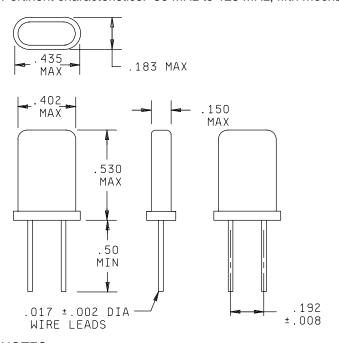
## PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR107/U

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-3098.

Pertinent characteristics: 50 MHz to 125 MHz; fifth mechanical overtone; noncontrolled; series resonance.



Inches	mm
.002	.05
.008	.20
.017	.43
.150	3.81
.183	4.65
.192	4.88
.402	10.21
.435	11.05
.500	12.70
.530	13.46

FSC 5955

## NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents are given for general information only.
- 3. Marking to be in accordance with MIL-PRF-3098.

FIGURE 1. Crystal unit - CR107/U.

## MIL-PRF-3098/83E

## **REQUIREMENTS:**

Dimensions, marking, and configuration: See figure 1.

Frequency range: 50 MHz to 125 MHz, inclusive.

Capacitance, shunt: 6.0 pF ±0.5 pF.

Mode of oscillation: Fifth mechanical overtone.

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Operating temperature range (noncontrolled): -55°C to +105°C, inclusive.

Frequency tolerance: ±50 ppm.

Equivalent resistance: 60 ohms, maximum.

Shock (specified pulse):

Frequency change permitted: ±5 ppm.

Equivalent resistance change permitted: ±10 percent. Vibration: Method 204, MIL-STD-202, test condition A.

Frequency change permitted: ±5 ppm.

Equivalent resistance change permitted: ±10 percent.

Thermal shock:

Frequency change permitted: ±5 ppm.

Equivalent resistance change permitted: ±10 percent.

Aging:

Frequency change permitted: ±5 ppm.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR

Navy - EC

Air Force -85

Review activities:

Air Force - 17, 99

Preparing activity: Army - CR

Agent:

DLA - CC

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